



# **Materials Acceptance and Certification (MAC) Implementation Update**

**Construction Conference  
February 2017**



## Materials Acceptance and Certification

- MAC is Implemented!
- MAC project is over & we are in maintenance mode
  - MAC has an OIT maintenance team made up of some of the original design team
  - Special arrangement because:
    - MAC impacts many users from a variety of stakeholders
    - Breaks in MAC sometimes means users cannot comply with contract requirements



## Materials Acceptance and Certification

- What is the definition of a break?
- System does not do what it needs to do within original design requirements
  - You can't do your job at all
- What's not a break?
  - If we missed it, it's not a break
  - If it does it, but we don't like the way it does it, it's not a break



## Materials Acceptance and Certification

- Breaks already fixed
  - Ability to revise QC manager on Contractor QC Plan
  - Conflict of interest error messages
  - Ability to add a document to a sample by users other than the company that created the sample
  - On the fly CPF report for asphalt samples



## Materials Acceptance and Certification

- Enhancements already submitted to OIT:
  - There are a bunch!
  - Main ones:
    - ERS
    - Contractor QC Plan Addendums
    - Notifications



## Materials Acceptance and Certification

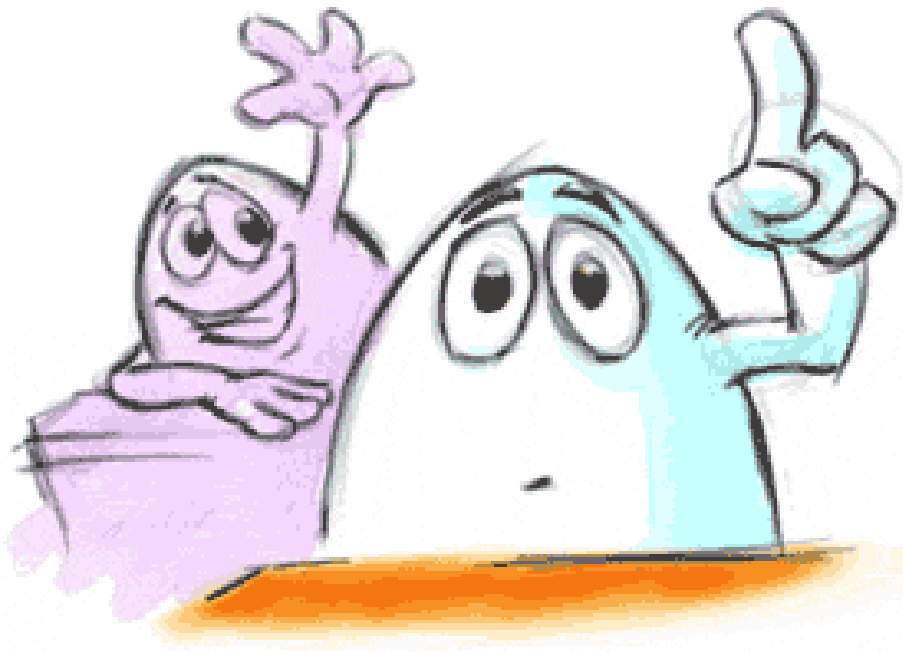
- Notifications Enhancement
  - Submit suggestions for notifications on the SMO MAC website
    - We will be adding a link to the SMO MAC website to assist



Florida Department of  
**TRANSPORTATION**



# Materials Acceptance and Certification



## MAC Common Questions



## Materials Acceptance and Certification

- Do I have to have an FDOT user id account to access MAC?





## Materials Acceptance and Certification

- **Yes** –
  - FDOT personnel
  - Non-FDOT personnel who need access to other FDOT applications besides MAC that require an FDOT user id account for access



## Materials Acceptance and Certification

- LIMS users = not anymore unless you meet the criteria on the previous slide
  - LIMS application and servers are GONE!
  - You should:
    - Request to terminate FDOT user id when account expires – or now
    - Create an ISA (next slide)
    - Work with local DAC to ensure you don't have a gap in access



## Materials Acceptance and Certification

- **No** - Non-FDOT personnel who do not need to access any other FDOT application other than MAC
- Access is by Internet Subscriber account (ISA)



## Materials Acceptance and Certification

- I have an FDOT user id account and I tried to change my password on the “MAC” login screen. It didn’t work. Why not? Now what do I do?



## Materials Acceptance and Certification

- First, the login portal is not MAC
  - Not MAC - It's a common portal used by many applications
  - The portal is broken for “change password” for FDOT user id accounts
    - It works for ISAs
  - The portal maintenance team knows it's broken & are working to fix it



## Materials Acceptance and Certification

- Second, it's not your "MAC password",  
it's your FDOT user id network password  
– MAC support team can't reset it



## Materials Acceptance and Certification

- FDOT Employees:
  - If you have previously logged into the password sync application, you can go there to reset it yourself
  - If you haven't send in an FDOT service desk ticket



## Materials Acceptance and Certification

- Non-FDOT employees
- Send in an FDOT service desk ticket
  - Ask for FDOT OIT of your domain to reset your FDOT user id account password
    - FDOT Domain is D5 – then request District 5 OIT
  - DO NOT say to reset your MAC password
  - If you need assistance with your domain, contact the local DAC





## Materials Acceptance and Certification

- I logged a sample under the wrong MAC Spec, category, type, sample purpose or sample level. Can I just change it?



## Materials Acceptance and Certification

- **No** (and Yes) but No
- The system will **let** you, but it won't **work**
- If there are different requirements, MAC isn't smart enough to ensure it will overwrite the old ones with the new ones
- Key fields – control the programming to add tests, limits, etc.



## Materials Acceptance and Certification

- A few things that are NOT key fields and **CAN** be changed
  - Mix Design Number
  - Production Facility Id
  - FDOT Sample Number
  - Location Information
  - Contact Information
- For these, don't enter a new sample and then ask for DAC to delete old sample
  - If you're not sure, ask a DAC FIRST



## Materials Acceptance and Certification

- Are there some things that weren't in LIMS that are in MAC?
- Are there some things that were in LIMS that aren't in MAC?



## Materials Acceptance and Certification

- Was not in LIMS - Is in MAC
  - Contractor QC Plan
    - Stop requiring the spreadsheet & MAC entry
  - Straightedge samples and test results
  - Base Thickness samples and test results
  - Concrete Pavement Thickness samples and test results
  - Earthwork Records System – future enhancement



## Materials Acceptance and Certification

- WAS in LIMS – Is NOT in MAC
  - As built information
    - SCO as built program is being developed for “PROABS” entries
      - Send spreadsheets to Sherry Valdez, State Construction Office, Final Estimates
  - Cross slope measurements weren’t in LIMS and are not in MAC



## Materials Acceptance and Certification

- Speaking of Rolling Straightedge samples and tests, why does this have to be in MAC and why is it so complicated?



## Materials Acceptance and Certification

- Why is it in MAC?
- Two criteria to determine if data belonged in MAC
  - Is the data needed for MC Review?
  - Are the TINS needed to track Active Technicians for the Independent Assurance Program?
    - If it's yes for EITHER, it belongs in MAC
    - Rolling straightedge is both!
      - Cross slope measurements are neither!





## Materials Acceptance and Certification

- Why is it so complicated?
  - Originally rolling straightedge tests were more complicated because we wanted to feed reports
    - Tests were simplified because reports aren't created yet and more programming is needed before they can be created



## Materials Acceptance and Certification

- Let's keep it simple
  - Test in MAC is designed to allow for all the results for the same day
    - Only need a new “sample” if the equipment or technician changes
    - Can record areas where no deficiencies were found and if any deficiencies were found on the same test entry - Not two samples!!



## Materials Acceptance and Certification

- The old form has not yet been updated to reflect MAC changes
  - It will be updated soon
  - Until then, it's only meant to be used as a QC data entry "raw data worksheet", if desired
  - It is NOT required
  - MAC entry is required
  - Requiring both is double entry
    - FDOT personnel, do not require the form
    - Do not scan the form into CDMS



## Materials Acceptance and Certification

- Can I get my “special” contract added to MAC?



## Materials Acceptance and Certification

- **Yes or No**
  - Is an FDOT Materials Office going to be performing a Final Materials Certification Review?
    - If yes, the DACs will create the non-standard JGS
    - If no, the DAC will NOT!



## Materials Acceptance and Certification

- There is a lot of work behind creating MAC Specs which drive the material acceptance requirements for Sample Life Cycle
- MAC is designed to feed the MC Review
- We aren't going to do all of that for contracts that don't get an MC Review by FDOT



## Materials Acceptance and Certification

- Non-FDOT contracts are not available to be “loaded” into MAC
  - Non-FDOT contracts (DEP, DOA) aren’t in an FDOT system source of record we can’t get it into MAC



## Materials Acceptance and Certification

- The MAC Spec let date doesn't match the let date on my contract. How do I get the right MAC Spec for my contract's let date?





## Materials Acceptance and Certification

- MAC Spec workbook versions span multiple FDOT specification workbooks
  - If the method of acceptance requirements don't change, we don't create a new workbook version
  - MAC Specs with version 1.x are the oldest



## Materials Acceptance and Certification

- When changes to the MAC Spec within a work book are designated in the x part of the X.x.
- 1.0 [01/2009] is the first version of the first workbook
- 1.1 [01/2009] is the next version of the first workbook and so on...



## Materials Acceptance and Certification

- When a new FDOT workbook with method of acceptance changes is published, we create a new MAC Spec workbook version with the effective workbook
- 2.0 [01/2016]
- 2.1 [01/2016]



## Materials Acceptance and Certification

- SMO MAC website has a summary to help ensure the right workbook version is on your contract
- This applies to Supplemental Specifications ONLY
  - All other types are assigned on a project by project basis with no regard to let date



## Materials Acceptance and Certification

- Visit the FDOT State Materials Office  
MAC website
- Especially the Training website



# Materials Acceptance and Certification

## State Materials Office

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## Office Resources

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## Most Requested

[MAC Resources](#)  
[Materials Bulletins](#)  
[Materials Manual](#)  
[Plant Stamps](#)  
[Production Facilities](#)  
[More...](#)

## Welcome

The Florida Department of Transportation's Materials Program ensures that the materials used in transportation construction projects meet the required department specifications. In addition, the program investigates new and emerging technologies to improve the long-term performance of transportation facilities. [Learn More](#)

## News

### **Asphalt Roadway Daily Report of Quality Control Upload to Materials Acceptance and Certification (MAC) Database**

*Posted: January 13, 2017*

Materials Bulletin 01-17; DCE Memorandum 01-17

### **Use of Recycled Concrete Aggregate as Backfill with Aluminum and Metalized Pipe**

*Posted: December 27, 2016*

Materials Bulletin 12-16; DCE Memorandum 18-16

### **Maximum Heat of Mass Concrete - Phase 2 (Summary)**

*Posted: December 7, 2016*

Research Report BDV31-977-07

### **Corrosion of Post-Tensioned Tendons with Deficient Grout (Summary)**

*Posted: November 17, 2016*

Research Report BDV29-977-04



# Materials Acceptance and Certification

## State Materials Office

State Materials Office / Programs and Services / MAC Development

## Materials Acceptance and Certification Development



**About the MAC Development Project** - The Laboratory Information Management (LIMS) was the previous business application that supported the quality of materials and workmanship for all construction projects through materials sampling, testing, and acceptance. While LIMS was mission critical to the Department for over a decade, it was no longer viable from a technology perspective and will have no vendor support after 2015. The Materials Acceptance and Certification (MAC) system is the enterprise application that replaced the current LIMS application.

**Questions?** [Contact the MAC Team](#) or view a list of [Frequently Asked Questions](#).

### Resources

[Access Instructions](#) | [Contacts](#) | [Documents for Industry](#) | [Production Environment](#) | [Training](#) 

### News and Information

#### Materials Acceptance and Certification System (MAC) Full Implementation

*Posted October 10, 2016* - The "Go Live" date for the full implementation of MAC was October 10, 2016 (Materials Bulletin 09-16/DCE Memo 13-16).

#### What To Do Before MAC Go Live - Industry and Construction Personnel

*Posted July 20, 2016* - Contractor and project personnel need to take steps in MAC **before** the Go Live date to ensure that samples can be entered into the system on the first day. [More...](#)

#### MAC Update

*Posted June 23, 2016* - The Materials Acceptance and Certification (MAC) System scheduled full implementation date of July 11, 2016 has been suspended. This is to allow the department and companies time to provide end user training before samples are required to be entered in the MAC production environment. A new date will be established and announced once the training has begun. [More...](#)

## Materials Acceptance and Certification

### State Materials Office

State Materials Office / Programs and Services / MAC Development / Training

### MAC Training



[Access Instructions](#) | [Contacts](#) | [Documents for Industry](#) | [Production Environment](#) | [Training](#)

#### Training Materials

#### 01 - Sample Life Cycle Information

- [Asphalt Sample How To and Information](#) (PDF-1.59MB)
- [Concrete Sample Information](#) (PDF-541KB)
- [Data Entry for Auger Pile Grout Samples](#) (PDF-1.78MB) - **New**
- [Data Entry for Structural Concrete Production Facility Chloride Samples](#) (PDF-782KB)
- [LIMS to MAC Material ID Crosswalk](#) (PDF-113KB)
- [MAC Spec Workbook Version to FDOT Contract Let Dates Crosswalk](#) (PDF-236KB) - **New**
- [Rolling Straight Edge Sample Life Cycle](#) (PDF-1.15MB)
- [Rolling Straightedge Test Results Q&A](#) (PDF-451KB) - **New**
- [Sample Life Cycle and MAR Flow Charts](#) (PDF-160KB)

Flow charts that document the sample life cycle and chain of custody for: 1) samples with no access granted and 2) samples with access granted. Also flow charts to document sample finalization, comparison package building, finding reviews and MAR process for: 1) issues other than straightedge or delineation; 2) straightedge findings; delineation findings

- [Sample Life Cycle How To](#) (PDF-3.24MB)
- [PA Concepts for MAC](#) (PDF-7.77MB)
- **Video: PA Concepts for MAC** (56:47)

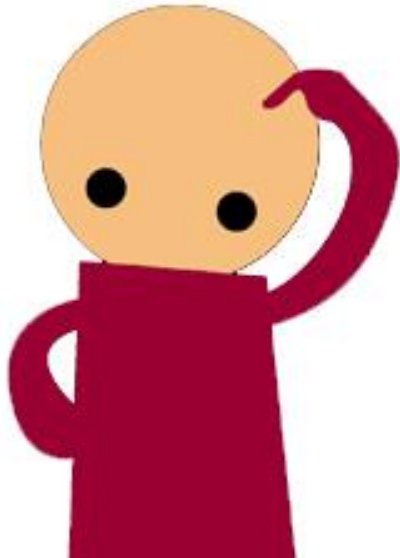
This optional training information provides detailed background information for users with the PA role. With the MAC implementation, responsibilities are being transferred to the PA. This video is designed to provide PAs who are unfamiliar with materials acceptance with the basic concepts

- **Video: Sample Life Cycle Data Entry and Submit Sample for FDOT Verification** (32:47)
- **Video: Sample Life Cycle FDOT Verification and Comparison Package** (56:47)

#### 02 - Training Environment

- [Training Environment](#) - For training preparation and sessions





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Questions?

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